P.O. BOX 529100, MIAMI, FL 33152

FPL
FLORIDA POWER & LIGHT COMPANY

April 26, 1979
L-79-102

Central Files
50-335

Mr. James P. O'Reilly, Director, Region II
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

Re: RII:JPO
50-335
IE BULLETIN 79-07

Florida Power & Light Company has reviewed the subject Bulletin and a response is attached.

Very truly yours,

Robert E. Uhrig
Vice President
Advanced Systems & Technology

REU/MAS/paf

Attachment

cc: Harold F. Reis, Esquire

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ATTACHMENT

RE: RII:JPO
50-335
IE Bulletin 79-07

Action Item 1

None of the methods specified in the Bulletin were used by the Architect-Engine (A/E) or the Nuclear Steam System Supply (NSSS) vendor.

Action Item 2

Not applicable to the A/E or NSSS vendor (based on Action Item 1).

Action Item 3

The code used by the A/E for analysis of the St. Lucie piping systems has been verified against the current version of the PIPESTRESS 2010 program. The PIPESTRESS 2010 program has, in turn, been compared with solutions to sample programs generated by similar, independently written programs in the public domain, namely ANSYS and PIPESD. This comparison shows the PIPESTRESS 2010 results to be substantially the same as results generated by the above programs and by hand calculations.

With respect to the NSSS vendor:

The time histories of the six components of force or moment "F_X, F_Y, F_Z, M_X, M_Z" at various sections of the reactor coolant main loop piping were computed separately for each of two horizontal and vertical directions of seismic excitation. Each component of force or moment from one horizontal direction of excitation was combined by absolute summation on a time basis with the corresponding codirectional component of force or moment from the vertical direction of excitation. The maximum combined value over all time of each of the six components of force or moment were chosen to define the seismic loading condition at the particular piping locations for one horizontal and the vertical excitations. A second seismic loading condition was also defined by repeating the absolute sum combination for the other horizontal and the vertical excitations. Each load set was compared to, and shown to be less governing than, the seismic loadings specified for design of the piping. Because the combinatio of loads was performed after the completion of the dynamic analysis portion of the computation, the appropriateness of the results of the combination was verified by direct observation of the uncombined inputs and the combine output.

The six components of force or moment (F_X, F_Y, F_Z, M_X, M_Y, M_Z) at the supports and various sections of the Pressurizer Surge Line and Spray Line for St. Lucie I piping were computed separately for each of two horizontal and the vertical directions of seismic excitation by response spectrum dynamic analysis. The codirectional components of force or moment from one horizontal and the vertical directions of excitation were combined by absolute summation to define the seismic loading condition

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excitations. A second seismic loading condition was also defined by repeating the absolute sum combination for the other horizontal and the vertical excitations. Each load set was compared to, and shown to be less governing than, the seismic loadings specified for design of the piping. The load combinations were calculated and verified by hand.

Action Item 4

Not applicable to the A/E or NSSS vendor (based on Action Item 1).